Procedural Guide for “**Accentuate the Negative**”



Temperature change formula:

START + CHANGE = END

(S + C = E)

ORDER OF OPERATIONS (E – S = C)

**PEMDAS** (E – C = S)

**P**- Parentheses **E**- Exponents **M/D** –Multiply and divide **A/S** -Add and subtract in

order from left to right order from left to right

Example: Simplify 

Simplify within parentheses = 

Evaluate Exponent = (16) – 8 x 0

Multiply/Divide from left to right = 16 – 0

Add/Subtract from left to right = 16

Adding and Subtracting Integers

|  |  |
| --- | --- |
| **Adding Same Sign**  If the signs are the same, **add** the numbers and keep the sign  Ex: 2 + 8 = 10  -3 + -8= -11 | **Subtracting Integers**  Re-write the question as addition problem  **(BOOM BOOM THEORY)**    2 – 7  2 + -7 = -5 |
| **Adding Different Signs**  If the signs are different, **subtract** the two numbers (because we take out zero pairs) and keep the sign of the bigger number.  Ex. 8 + -12= -4  -3 + 2= -1 | Questions to ask myself:  1. Is it addition or subtraction?  If addition (I add) if subtraction (I use Boom Boom Theory)  2. Are the signs the same or different  Same signs = add / keep sign  Different signs = subtract and keep sign of higher # |

If the signs are the same you perform the operation given in the question -3 + -2 = -5 3 + 2 = 5

If the signs are opposite/ different you perform the opposite operation given in the question

-3 + 2 = -1 -5 − 3 = -8

**Multiplying and Dividing Integers**

|  |  |
| --- | --- |
| **Multiplying**  Positive x positive = positive  Negative x negative = positive  Positive x negative = negative  Negative x positive = negative  Ex: 2 x 2 = 4  -2 x -2 = 4  -4 x 2 = -8  4 x -2 = -8 | **Dividing**  Positive ÷ Positive = **positive**  Negative ÷ Negative = **positive**  Positive ÷ negative = Negative  Negative ÷ positive = Negative  Ex: 4 ÷ 2 = 2  -4 ÷ -2 = 2  -4 ÷ 2 = -2  4 ÷ -2 = -2 |

**Rules are the same for multiplying and dividing**

Same signs = positive answer Different signs = negative answer

PROPERTIES

**Associative Property**- Number can be grouped and solved in different order.

Applies to addition and multiplication

Ex. (2+3) + 5 = 5 + 5 =10

2 + (3+5) = 2 + 8 = 10

**Commutative**- Order does not matter when writing a problem.

Only applies addition and multiplication

Ex. 1 +2 = 2 +1

1\* 2= 2\*1

**Distributive-** Distribute the number outside of the parentheses to **each** number inside the parentheses.

Factored form expanded form

Ex. 2(3+4) = 2\*3 +2\*4

6(2 – 1) = 6\*2 -- 6\*1

**Absolute Value-** is a numbers distance from zero. Always a positive number!

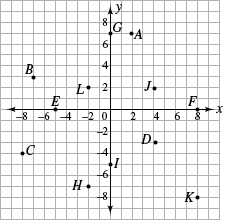


**Additive Inverse-** A numbers opposite

Ex: the additive inverse of 2 is -2

**Coordinate Plane**

II I



III IV

B (-5, 3) D (4, -3) G ( 0, 7)

A ( , ) E ( , ) I ( , )

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